Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-12 (cancelled)

Claim 13 (new): A method for generating a linked list corresponding to a memory in an electronic device, comprising:

(a) forming a linked list for the memory, wherein each entry of the linked list corresponds to a portion of the memory;

(b) performing a built-in self test (BIST) on the memory to identify a first defective portion of the memory; and

(c) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory.

Claim 14 (new): The method of claim 13, wherein the memory being tested in step (b) is used for storing the linked list, and step (c) comprises:

excluding the use of the defective portion of the memory in storing the linked list.

Claim 15 (new): The method of claim 13, wherein the memory being tested in step (b) is a packet buffer for data storage.

Claim 16 (new): The method of claim 13, wherein the step (c) of updating is performed before the BIST performed in step (b) is completely through with the entirety of the memory.

Claim 17 (new): The method of claim 16, further comprising:

(d) after performing step (c) of updating, continuing the BIST in step (b) to identify a second defective portion of the memory; and

(e) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified second defective portion of the memory.

Claim 18 (new): The method of claim 17, wherein the electronic device comprising the memory is a network switch.

Claim 19 (new): A method for generating a linked list corresponding to a memory in an electronic device, comprising:

forming a linked list for the memory, wherein the linked list comprises a plurality of entries each having a first pointer field and a second pointer field, the first pointer field for storing a pointer to a corresponding portion of the memory and the second pointer field for storing a pointer to another entry of the linked list;

performing a built-in self test (BIST) on the memory to identify at least one defective portion of the memory; and

updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified defective portion of the memory, so that none of the entries of the updated linked list comprises a pointer in the second pointer field that points to the entry corresponding to the identified defective portion.

Claim 20 (new): The method of claim 19, wherein the electronic device comprising the memory is a network switch.

Claim 21 (new): The method of claim 19, wherein the memory being tested in the BIST step is a packet buffer for data storage.

Claim 22 (new): A method for generating a linked list corresponding to a memory, comprising:

(a) forming a linked list for the memory, wherein the linked list comprises a plurality of entries each having a first pointer field and a second pointer field, the first pointer field for storing a pointer to a corresponding portion of the memory and the second pointer field for storing a pointer to another entry of the linked list;

(b) performing a built-in self test (BIST) on the memory to identify a first defective portion of the memory;

(c) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified first defective portion of the memory;

(d) after step (c) is completed, continuing the BIST to identify a second defective portion of the memory; and

(e) updating the linked list to remove from the linked list the entry of the linked list corresponding to the identified second defective portion of the memory.